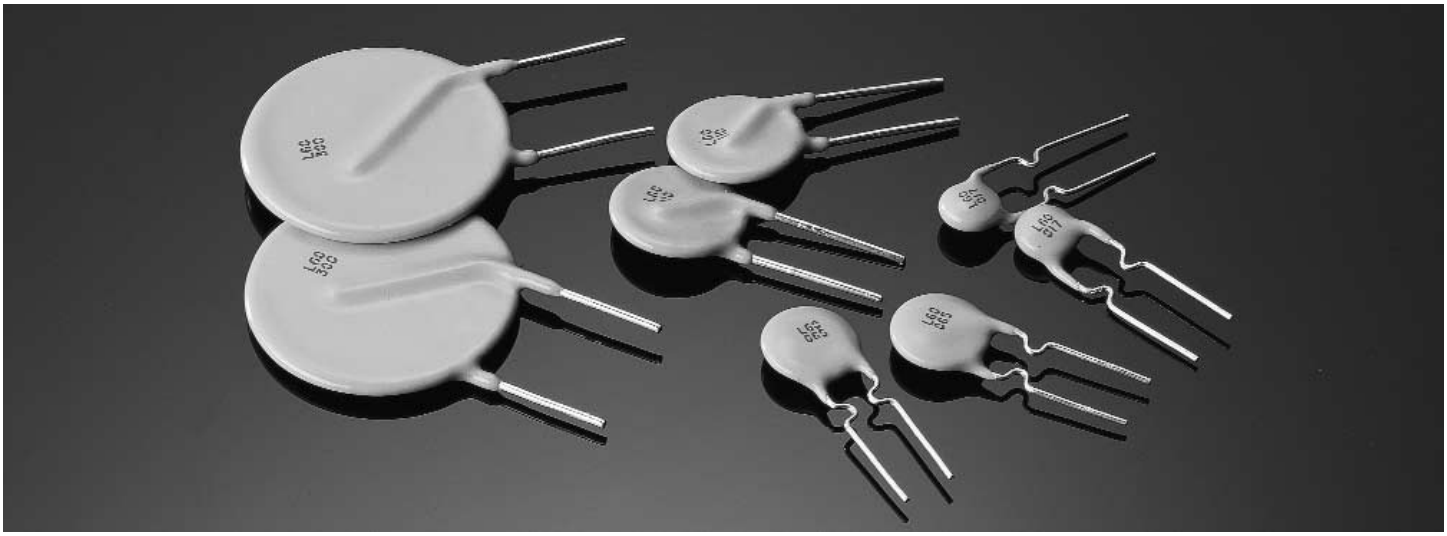
查询60R010供应商

60R Series



- The 60R Series Resettable devices utilize a unique polymer-based, Positive Temperature Coefficient (PTC) material to protect electrical circuits against overcurrent conditions.
- In normal operation, the 60R Series PTC has many conductive paths and a very low resistance. In an overcurrent condition, the temperature of the polymer material rises. This dramatically reduces the conductive paths resulting in an immediate rise in resistance. In this condition, the device provides circuit protection by significantly limiting the flow of current. However, once the cause of the initial overcurrent condition is eliminated, the 60R Series PTC cools down and resets to a low resistance value permitting the normal current flow to resume.
- The 60R Series is a 60V Radial Leaded Device with a 40A Short Circuit Rating.

AGENCY APPROVALS: Recognized under the Components Program of Underwriters Laboratory and the Component Acceptance Program of CSA. TUV approved.

AGENCY FILE NUMBERS: UL E183209, CSA LR 108832

PHYSICAL SPECIFICATIONS:

Materials: Leads

60R010: Tin coated constantan, 24 AWG (0.020" Dia.)
60R017-040: Tin plated copper-clad steel, 24 AWG (0.020" Dia.)
60R050-090: Tin plated copper, 24 AWG (0.020" Dia.)
60R110-375: Tin plated copper, 20 AWG (0.032" Dia.)

Lead Solderability: MIL-STD-202, Method 208E

Coating: Thermoset Coating

Device Labeling: Device is marked with the letter 'L', amperage rating, voltage rating & date code.

Packaging: Standard bulk packaging is 500 pieces per container. Optional tape and reel packaging per EIA 468-B is also available.

Standard reel quantities:

Part Number	Reel Quantity	Part Number	Reel Quantity
R60R010 R60R020 R60R025 R60R030 R60R040 R60R050 R60R065 R60R075 R60R090	3000	R60R017	2500
		R60R110 R60R135 R60R160 R60R185	1500
		60R250 60R300 60R375	Bulk Only 500 Per Container

ENVIRONMENTAL SPECIFICATIONS:

Passive Aging: 85°C, 1000 Hours. ±5% typical resistance change.

Humidity Aging: 85°C, 85% R.H., 1000 hours. ±5% typical resistance change.

Thermal Shock: 85°C / –40°C, 20 times. ±10% typical resistance change.

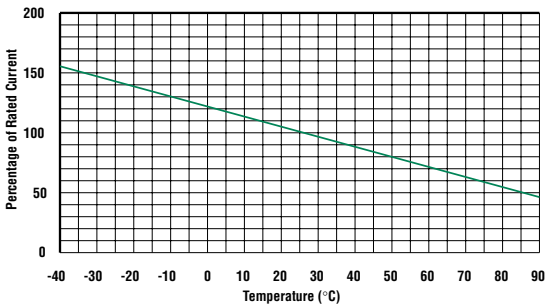
Vibration: MIL-STD 202, Method 201. No resistance change.

Mechanical Shock: MIL-STD-202, Method 213 test condition I (100 g's, 6 sec.). No resistance change.

Max. Surface Temperature: 125°C

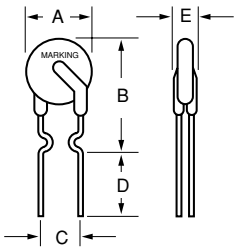
Operating/Storage Temperature: –40°C to 85°C

Rerating Curve for 60R Series



60R Series

Dimensions (Inches)

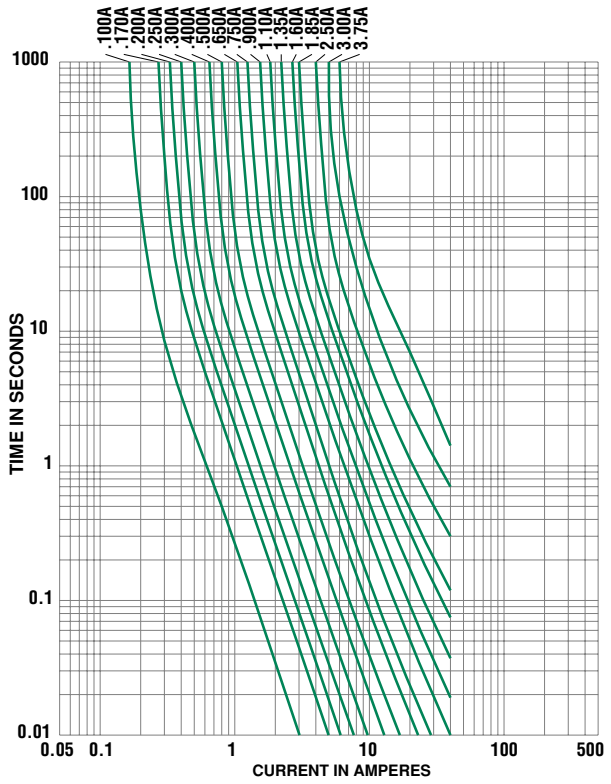


Note: Stand-offs only used for 60R010-60R090

Part Number	'A' (Max.)	'B' (Max.)	'C' (Typ.)
60R010	7.37 (0.29)	12.7 (0.50)	5.08 (0.20)
60R017	7.37 (0.29)	12.7 (0.50)	5.08 (0.20)
60R020	7.37 (0.29)	12.19 (0.48)	5.08 (0.20)
60R025	7.37 (0.29)	12.7 (0.50)	5.08 (0.20)
60R030	7.37 (0.29)	12.95 (0.51)	5.08 (0.20)
60R040	7.62 (0.30)	13.46 (0.53)	5.08 (0.20)
60R050	7.62 (0.30)	13.72 (0.54)	5.08 (0.20)
60R065	9.65 (0.38)	14.48 (0.57)	5.08 (0.20)
60R075	10.41 (0.41)	15.24 (0.60)	5.08 (0.20)
60R090	11.68 (0.46)	15.75 (0.62)	5.08 (0.20)
60R110	12.95 (0.51)	18.0 (0.71)	5.08 (0.20)
60R135	14.48 (0.57)	19.56 (0.77)	5.08 (0.20)
60R160	16.26 (0.64)	21.34 (0.84)	5.08 (0.20)
60R185	17.78 (0.70)	22.86 (0.90)	5.08 (0.20)
60R250	21.34 (0.84)	26.42 (1.04)	10.16 (0.40)
60R300	24.89 (0.98)	29.97 (1.18)	10.16 (0.40)
60R375	28.45 (1.12)	33.53 (1.32)	10.16 (0.40)

Dimension 'D' is 0.30" Minimum
Dimension 'E' is 0.12" Maximum

Average Time Current Curves



ORDERING INFORMATION:

Part Number	I_{hold} (A)	I_{trip} (A)	V_{max} (Vdc)	I_{max} (A)	P_d max. (W)	Maximum Time To Trip		Resistance	
						Current (A)	Time (Sec)	R_{IL} (W)	R_{AT} (W)
60R010	0.10	0.20	60	40	0.38	0.50	4.0	2.50	7.50
60R017	0.17	0.34	60	40	0.48	0.85	3.0	3.30	8.00
60R020	0.20	0.40	60	40	0.41	1.00	2.2	1.83	4.40
60R025	0.25	0.50	60	40	0.45	1.25	2.5	1.25	3.00
60R030	0.30	0.60	60	40	0.49	1.50	3.0	0.88	2.10
60R040	0.40	0.80	60	40	0.56	2.00	3.8	0.55	1.29
60R050	0.50	1.00	60	40	0.77	2.50	4.0	0.50	1.17
60R065	0.65	1.30	60	40	0.88	3.25	5.3	0.31	0.72
60R075	0.75	1.50	60	40	0.92	3.75	6.3	0.25	0.60
60R090	0.90	1.80	60	40	0.99	4.50	7.2	0.20	0.47
60R110	1.10	2.20	60	40	1.50	5.50	8.2	0.15	0.38
60R135	1.35	2.70	60	40	1.70	6.75	9.6	0.12	0.30
60R160	1.60	3.20	60	40	1.90	8.00	11.4	0.09	0.22
60R185	1.85	3.70	60	40	2.10	9.25	12.6	0.08	0.19
60R250	2.50	5.00	60	40	2.50	12.50	15.6	0.05	0.13
60R300	3.00	6.00	60	40	2.80	15.00	19.8	0.04	0.10
60R375	3.75	7.50	60	40	3.20	18.75	24.0	0.03	0.08

I_{hold} = Hold Current: maximum current device will sustain for 4 hours without tripping in 20°C still air.
I_{trip} = Trip Current: minimum current at which the device will trip in 20°C still air.
V_{max} = Maximum voltage device can withstand without damage at rated current (Imax)
I_{max} = Maximum fault current device can withstand without damage at rated voltage (Vmax)
P_d = Power dissipated from device when in the tripped state at 20°C still air.
R_{IL} = Minimum resistance of device in initial (un-soldered) state.
R_{AT} = Maximum resistance of device at 20°C measured one hour after tripping.

CAUTION: Operation beyond the specified ratings may result in damage and possible arcing and flame.